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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of:  
Dirk M. Anderson

Docket No.: 2852-G

Group Art Unit: 1646

Serial No: 10/802,133

Examiner: --to be assigned--

Filed: March 16, 2004

For: KITS FOR DETECTING RANKL PROTEINS OR NUCLEIC ACIDS

**INFORMATION DISCLOSURE STATEMENT**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

In accordance with 37 CFR §§ 1.56 and 1.97 through 1.98, applicant wishes to make known to the Patent and Trademark Office the references set forth on the attached Form PTO-1449. The aforesaid references are made known to the Patent and Trademark Office in compliance with applicant's duty to disclose all information he is aware of which may be material to the examination of the above-identified application. Kindly acknowledge receipt of this Statement and make the cited references of record in the subject application.

Pursuant to 37 CFR § 1.98(d), copies of references already cited by the U.S. Patent and Trademark Office or submitted in a prior application from which the present application claims priority under 35 USC § 120 are not required to be submitted with the present information. Accordingly, copies are not enclosed of patents, publications, and other information listed on the accompanying Form PTO-1449 which were previously cited by or submitted to the Office in one or more of prior applications Serial No. 09/865,363 filed May 25, 2001 (now allowed), Serial No. 09/577,780 filed May 24, 2000 (now U.S. patent No. 6,419,929), and Serial No. 08/995,659 filed December 22, 1997 (now U.S. patent No. 6,242,213). The present application is a continuation of prior application Serial No. 09/865,363 which is relied upon for an earlier filing date under 35 USC 120. The information disclosure statements submitted in the aforementioned applications relied upon for priority complied with 37 CFR § 1.98(a)-(c). Certain references listed on the attached Form PTO-1449 were published after the filing date of one or more of the prior applications.

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date appearing below.

November 16, 2004

Date

DeDe Lindholm

Signature

There are 14 U.S. patents cited on the attached Form PTO-1449 and listed below which were not previously cited by or submitted to the Office in one or more of the applications relied upon for priority. Copies of the 14 U.S. patents are not enclosed since the Office has waived the requirement under 37 CFR § 1.98 (a)(2)(i) to submit a copy of each cited U.S. patent and each U.S. patent application publication for all U.S. national patent applications filed after June 30, 2003. They are:

U.S. Patents

5,670,391  
5,710,013  
5,767,244  
5,789,550  
5,961,974  
6,015,938  
6,150,090  
6,242,213  
6,271,349  
6,410,516  
6,419,929  
6,528,482  
6,537,763  
6,740,522

Additionally, there are 9 foreign patent documents cited on the enclosed PTO-1449 and listed below which were not previously cited by or to the Office in a prior application, and copies are enclosed herewith. They are:

Foreign Patent Documents

EP 0873998 A2  
EP 0955372 A2  
WO 93/08207  
WO 95/33051  
WO 98/28423  
WO 98/54201  
WO 99/29865  
WO 99/65449  
WO 99/65495

Finally, there are 33 other documents cited on the enclosed PTO-1449 and listed below which were not previously cited by or to the Office in a prior application, and copies are enclosed herewith. They are:

Other Documents

Baker and Reddy  
Camerini et al.  
Durkop et al.  
Embl-est database accession No. R93478  
Galibert et al.  
GenEmbl database accession No. X15271  
George et al.  
Gibbs and Oliff

Cont.

Guise and Mundy  
Huang and Schreiber  
Itoh et al.  
Johnson et al.  
Kodaira et al.  
Kwon et al.  
Lynch et al.  
Mallet et al.  
Nakagawa et al.  
Pullen et al.  
Roodman et al.  
Rossi et al.  
Rothe et al.  
Schall et al.  
Simonet et al.  
Smith et al.  
Stamenkovic et al.  
Takahashi et al.  
Tsukii et al.  
White  
Wong et al. (2 references)  
Xing et al.  
Xu et al.  
Yun et al.

The information disclosure statement submitted herewith is being filed before the mailing date of a first Office action on the merits. Thus, no fee is believed to be due for the filing of this information disclosure statement. However, should it be determined that a fee is necessary, applicant authorizes the Commissioner to charge applicant's deposit account no. 09-0089 in an amount necessary to permit consideration of this Information Disclosure Statement.

Applicant requests consideration of this information and passage of the application to issue.

Respectfully submitted,



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Form PTO-1449

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.

2852-G

SERIAL NO.

10/802,133

## INFORMATION DISCLOSURE CITATION

APPLICANT

Dirk M. Anderson

FILING DATE

March 16, 2004

GROUP

1646

(Use several sheets if necessary)

## U.S. PATENT DOCUMENTS

EXAMINER	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,670,319	09/23/97	Goeddel et al.			
	5,710,013	01/20/98	Goeddel et al.			
	5,763,223	06/09/98	Wiley et al.			
	5,767,244	06/16/98	Goeddel et al.			
	5,789,550	08/04/98	Goeddel et al.			
	5,843,678	12/01/98	Boyle			
	5,961,974	10/05/99	Armitage et al.			
	6,015,938	01/18/00	Boyle et al.			
	6,017,729	01/25/00	Anderson et al.			
	6,150,090	11/21/00	Baltimore et al.			
	6,242,213	06/05/01	Anderson			
	6,242,586	06/05/01	Gorman et al.			
	6,271,349	08/07/01	Dougall et al.			
	6,316,408	11/13/01	Boyle			
	6,410,516	06/25/02	Baltimore et al.			
	6,419,929	07/16/02	Anderson			
	6,525,180	02/25/03	Gorman et al.			
	6,528,482	03/04/03	Anderson et al.			
	6,537,763	03/25/03	Dougall et al.			
	6,740,522	05/25/04	Anderson			

## FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
EP 0816380 A1	07.01.98	EP			
EP 0873998 A2	28.10.98	EP			
EP 0911342 A1	28.04.99	EP			
EP 0955372 A2	10.11.99	EP			
WO 93/08207	29.04.93	PCT			
WO 95/33051	07.12.95	PCT			
WO 96/34095	31.10.96	PCT			
WO 97/23614	03.07.97	PCT			
WO 98/25958	18.06.98	PCT			
WO 98/28423	02.07.98	PCT			
WO 98/46644	22.10.98	PCT			
WO 98/46751	22.10.98	PCT			
WO 98/54201	03.12.98	PCT			
WO 99/29865	06.17.99	PCT			
WO 99/65449	23.12.99	PCT			
WO 99/65495	23.12.99	PCT			
WO 01/23549	05.04.01	PCT			
WO 02/15846	28.02.02	PCT			

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<b>Form PTO-1449</b>		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. <b>2852-G</b>	SERIAL NO. <b>10/802,133</b>
<b>INFORMATION DISCLOSURE CITATION</b>  (Supplemental sheet)			APPLICANT <b>Dirk M. Anderson</b>	
			FILING DATE <b>March 16, 2004</b>	GROUP <b>1646</b>
<b>OTHER DOCUMENTS</b> (Including Author, Title, Date, Pertinent Pages, Etc.)				
		Anderson et al., "A homologue of the TNF receptor and its ligand enhance T-cell growth and dendritic-cell function," <i>Nature</i> 390:175-179, 1997.		
		<del>Baker, Stacey J. and Reddy, E. Premkumar, "Transducers of life and death: TNF receptor superfamily and associated proteins," <i>Oncogene</i>, 12(1):1-9, 1996.</del>		
		Boyle v. Gorman and Mattson, Board of Patent Appeals and Interferences, Interference No. 104,336, Paper No. 39.		
		<del>Camerini et al., "The T cell activation antigen CD27 is a member of the nerve growth factor/tumor necrosis factor receptor gene family," <i>J. Immunol.</i> 147:3165, 1991.</del>		
		<del>Durkop et al., "Molecular cloning and expression of a new member of the nerve growth factor receptor family that is characteristic for Hodgkin's Disease," <i>Cell</i> 68:421, 1992.</del>		
		Embl database entry HS421358; accession no. W74421, homo sapiens cDNA clone 346544 containing alu repetitive element, Hillier et al., June, 1996.		
		<del>Embl-est database accession no. R93478, yq16f06.rl homo sapien cDNA clone 197123 5' sequence, Hillier et al., August, 1995.</del>		
		<del>Galibert et al., "The involvement of multiple tumor necrosis factor receptor (TNFR)-associated factors in the signaling mechanisms of receptor activator of NF-<math>\kappa</math>B, a member of the TNFR superfamily," <i>J. Biol. Chem.</i> 273(51):34120-34127, 1998.</del>		
		<del>GenEmbl database accession no. X15271, locus.HSTRGV3F, human T-cell receptor gammaV3F, Lefranc, M. P., March, 1991.</del>		
		<del>George et al., "Current methods in sequence comparison and analysis, selected methods and applications, eds. David H. Schlesinger, Alan R. Liss, Inc., New York, pp. 124-129, 1988.</del>		
		<del>Gibbs, Jackson B. and Oliff, Allen, "Pharmaceutical research in molecular oncology," <i>Cell</i>, 79:193-198, 1994.</del>		
		Gray et al., " P-element-induced recombination in drosophila melanogaster: hybrid element insertion," <i>Genetics</i> 144(4):1601-1610, 1996.		
		<del>Guisse, Theresa A. and Mundy, Gregory R., "Cancer and bone," <i>Endocrine Reviews</i> 19(1):18-54,1998.</del>		
		<del>Huang, Jing and Schreiber, Stuart L., "A yeast genetic system for selecting small molecule inhibitors of protein-protein interaction in nanodroplets," <i>Proc. Natl. Acad. Sci. USA</i>, 94:13396-13401, 1997.</del>		
		<del>Itoh et al., "The polypeptide encoded by the cDNA for human cell surface antigen Fas can mediate apoptosis," <i>Cell</i> 66:233, 1991.</del>		
		<del>Johnson et al., "Expression and structure of the human NGF receptor," <i>Cell</i> 47:545, 1986.</del>		
		<del>Kodaira et al., "Cloning and characterization of the gene encoding mouse osteoclast differentiation factor," <i>Gene</i> 230:121-127, 1999.</del>		
EXAMINER		DATE CONSIDERED		
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.				

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<b>OTHER DOCUMENTS (cont.)</b>				
	<input checked="" type="checkbox"/>	Kwon et al., "cDNA sequences of two inducible T-cell genes," <i>Proc. Natl. Acad. Sci. USA</i> 86:1963, 1989.		
	<input checked="" type="checkbox"/>	Lacey et al., "Osteoprotegerin ligand is a cytokine that regulates osteoclast differentiation and activation," <i>Cell</i> , 93:165-175, 1998.		
	<input checked="" type="checkbox"/>	Lynch et al., "A fluorescence polarization based Src-SH2 binding assay," <i>Analytical Biochemistry</i> , 247:77-82, 1997.		
	<input checked="" type="checkbox"/>	Mallet et al., "Characterization of the MRC OX40 antigen of activated CD4 positive T lymphocytes – a molecule related to nerve growth factor receptor," <i>EMBO J.</i> 9:1063, 1990.		
	<input checked="" type="checkbox"/>	Marra et al., The WashU-HHMI Mouse EST project, Accession Number AA170348, 16 February 1997.		
	<input checked="" type="checkbox"/>	Nakagawa et al., "RANK is the essential signaling receptor for osteoclast differentiation factor in osteoclastogenesis," <i>Biochem. and Biophys. Res. Comm.</i> 253:395-400, 1998.		
	<input checked="" type="checkbox"/>	Pullen et al., "CD40 –tumor necrosis factor receptor-associated factor (TRAF) interactions: regulation of CD40 signaling through multiple TRAF binding sites and TRAF hetero-oligomerization," <i>Biochemistry</i> 37(34):11836-11845, 1998.		
	<input checked="" type="checkbox"/>	Roodman, G. David, "Advances in bone biology: the osteoclast," <i>Endocr Rev.</i> 17(4):308-332, 1996.		
	<input checked="" type="checkbox"/>	Rossi et al., "Monitoring protein-protein interactions in intact eukaryotic cells by $\beta$ -galactosidase complementation," <i>Proc. Natl. Acad. Sci. USA</i> 91:8405-8410, 1997.		
	<input checked="" type="checkbox"/>	Rothe, M. et al., "The TNFR2-TRAF signaling complex contains two novel proteins related to baculoviral inhibitor of apoptosis proteins," <i>Cell</i> 83:1243-1252, 1995.		
	<input checked="" type="checkbox"/>	Schall et al., "Molecular cloning and expression of a receptor for human tumor necrosis factor," <i>Cell</i> 61:361, 1990.		
	<input checked="" type="checkbox"/>	Simonet et al., "Osteoprotegerin: A novel secreted protein involved in the regulation of bone density," <i>Cell</i> 89:309-319, 1997.		
	<input checked="" type="checkbox"/>	Smith, C. et al., "A receptor for tumor necrosis factor defines an unusual family of cellular and viral proteins," <i>Sci.</i> 248:1019-1022, 1990.		
	<input checked="" type="checkbox"/>	Stamenkovic et al., "A B-lymphocyte activation molecule related to the nerve growth factor receptor and induced by cytokines in carcinomas," <i>EMBO J.</i> 8:1403, 1989.		
	<input checked="" type="checkbox"/>	Suda et al., "Modulation of osteoclast differentiation by local factors," <i>Bone</i> 17(2):87S-91S; 1995.		
	<input checked="" type="checkbox"/>	Suda et al., "Modulation of osteoclast differentiation," <i>Endocr Rev.</i> 13:66-80, 1992.		
	<input checked="" type="checkbox"/>	Suda et al., "Modulation of osteoclast differentiation: update 1995," in <i>Endocr Rev. Monographs</i> , 4(1):266-270; 1995.		
EXAMINER			DATE CONSIDERED	

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			FILING DATE <b>March 16, 2004</b>	GROUP <b>1646</b>
<b>OTHER DOCUMENTS (cont.)</b>				
		Takahashi N et al., "A new member of tumor necrosis factor ligand family, ODF/OPGL/TRANCE/RANKL, regulates osteoclast differentiation and function," <i>Biochem Biophys Res Commun</i> 1999; 256:449-455.		
		Tsukii K et al., "Osteoclast differentiation factor mediates an essential signal for bone resorption induced by 1 $\alpha$ ,25-dihydroxyvitamin D <sub>3</sub> , prostaglandin E <sub>2</sub> , or parathyroid hormone in the microenvironment of bone," <i>Biochem Biophys Res Commun</i> 1998; 246:337-341.		
		White, Michael A., "The yeast two-hybrid system: forward and reverse," <i>Proc. Natl. Acad. Sci. USA</i> , 93:10001-10003, 1996.		
		Wiley, SR et al., "Identification and characterization of a new member of the TNF family that induces apoptosis," <i>Immunity</i> 1995; 3(6):673-682.		
		Wong et al., "TRANCE is a novel ligand of the tumor necrosis factor receptor family that activates c-Jun N-terminal kinase in T cells," <i>J. of Biological Chemistry</i> 272(40):25190-25194, 1997.		
		Wong et al., "TRANCE (Tumor necrosis factor [TNF]-related activation-induced cytokine), a new TNF family member predominantly expressed in T cells, is a dendritic cell-specific survival factor," <i>J. Exp. Med.</i> 186(12):2075-2080, 1997.		
		Wong et al., "The TRAF family of signal transducers mediates NF- $\kappa$ B activation by the TRANCE receptor," <i>J. Biol. Chem.</i> 273(43):28355-28359, 1998.		
		Xing et al., "Mechanisms by which NF- $\kappa$ B regulates osteoclast numbers," Abstract ASBMR Meeting, U of TX Health Science Center, 1998.		
		Xu et al., "Targeted disruption of TRAF3 leads to postnatal lethality and defective T-dependent immune responses," <i>Immunity</i> 5:407-415, 1996.		
		Yasuda et al., "Osteoclast differentiation factor is a ligand for osteoprotegerin/osteoclastogenesis-inhibitory factor and is identical to TRANCE/RANKL," <i>Proc. Natl. Acad. Sci.</i> 95:3597-3602, 1998.		
		Yun et al., "OPG/FDCR-1, a TNF receptor family member, is expressed in lymphoid cells and is up-regulated by ligating CD40 <sup>1</sup> ," <i>J. Immunol.</i> 161:6113-6121, 1998.		
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